



NASA Headquarters  
Washington, DC 20546

**H OWI-7040-R008B**

September 1, 1999

**Aero-Space Technology Strategic Enterprise (HQ/Code R)**

**Office Work Instruction**

# **Program Evaluation**

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Responsible Office: Code RP  
Subject: Program Evaluation

### DOCUMENT HISTORY LOG

<u>Status</u> <u>(Draft/</u> <u>Baseline/</u> <u>Revision/</u> <u>Canceled)</u>	<u>Document</u> <u>Revision</u>	<u>Effective</u> <u>Date</u>	<u>Description</u>
Baseline		1/20/1999	
Revision	A	4/28/1999	Changed heading of "Responsible Organization" column of paragraph 6 to read "Actionee" and revised column entries to better identify who has responsibility for executing each task. Revised paragraph 5 flowchart for record symbols to be consistent with quality record media. Revised paragraph 6 procedure text to better identify criteria for acceptable workmanship and formats of developed materials. Revised paragraph 5 flowchart to be consistent with "actionee" in paragraph 6 text. Revised paragraph 7 Quality Records table to eliminate dual media versions of quality records. Entries now specify only the medium of the controlled version of the quality record. Revised Quality Record table format to conform to revised HCP 1400-1. Revised retention/disposition times to conform with NPG 1441.
Revision	B	9/1/1999	Defined "Electronic Document Control" per NCR 331 and made appropriate references in work instruction text. Specified workmanship criteria to be applied in program/project formulation and approval process. Revised work instruction text to specify more clearly approval and concurrence process. Deleted from Quality Records those documents that were inputs (as opposed to outputs). Made changes to Quality Record retention and disposition schedule to insure consistency with which the same quality record is cited in different Code R work instructions.

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**Approved by:** Original signed by Spence M. Armstrong - September, 1, 1999

1. **PURPOSE** The purpose is to document the process of evaluating programs in the Aero-Space Technology Enterprise (HQ/R).
2. **SCOPE and APPLICABILITY**
  - 2.1 This OWI covers program evaluations performed in Code R for the R&T Base and Focused programs and the Commercial Technology programs. It is an ongoing process that provides evaluations at varying intervals.
  - 2.2 The work in this OWI is performed within Code RP and RW and involves evaluations going to the AA, Codes RG and RP (Program Planning), and senior managers.
3. **DEFINITIONS**

AA	Associate Administrator for OAT
AO	Action Officer. Within RP, the AO for the monthly report and the quarterly PMC report is the PM-E. Within RW, the AO for the monthly report is the CPM.
ASTAC	Aero-Space Technology Advisory Committee
CPM	Commercial Program Manager, an assignment in Code RW
DAA	Deputy Assistant Administrator for OAT.
Electronic Document Control	To ensure the control of electronic documents and data, the Code RP Division Director has the responsibility to explicitly provide for: <ul style="list-style-type: none"><li>• The authentication of controlled electronic documents/data as approved for issue/use;</li><li>• The identification of a secure electronic storage location that restricts the maintenance of controlled electronic documents/data (i.e., posting, deletion) to the authorized actionee/employee, and allows, at a minimum, for access by employees that require the controlled documents/data to perform work; and</li><li>• The identification of release/use restrictions, if applicable to controlled electronic documents/data.</li></ul>

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External Assessment	Formal and ad hoc assessment by an organization outside the Agency. Such external groups review and critique program process to plan. Progress to plan includes quality of the technical accomplishment, timeliness of the delivery of the accomplishment and responsible use of resources. Comments may include recommendations regarding program directions and emphases.
IAR	Independent Annual Review
OAT	Office of Aero-Space Technology
PAPAC	Provide Aerospace Products and Capabilities
PCA	Program Commitment Agreement
PMC	Program Management Council
PM-E	Process Manager-Evaluation, an assignment in Code RP
Program	Consistent with NPG 7120.5, a program is an activity within the enterprise having defined goals, objectives, requirements, funding, and consisting of one or more projects.
RLT	OAT Strategic Enterprise (Code R/HQ) Leadership Team, including the AA, DAA, and Division Directors (RB, RG, RP, RS and RW)

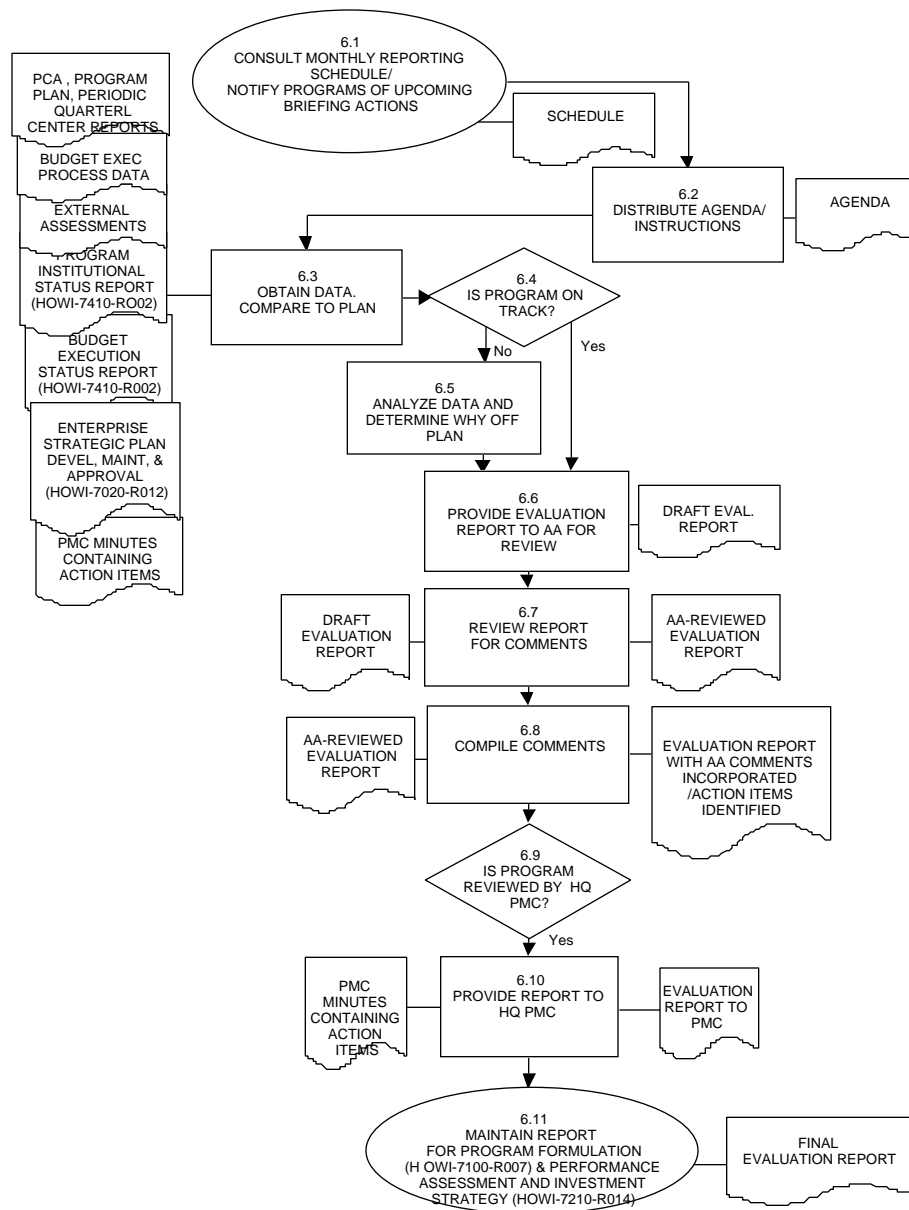
**4. REFERENCE DOCUMENTS**

NPD 1000.1A	NASA Strategic Plan
NPG 1000.2	NASA Strategic Management Handbook
NPD 7120.4A	Program/Project Management
NPG 7120.5A	Project Management Processes and Requirements

The correct version of the NPD, NPG, NHB documents cited above may be obtained from the NODIS Directives Library at  
<http://nodis.hq.nasa.gov/Library/processes.html>

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## 5. FLOWCHART



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## 6. PROCEDURE

<u>Step</u>	<u>Actionee</u>	<u>Action</u>
6.1	RP AO	The PM-E, in coordination with the AA or DAA, prepares and maintains a program evaluation reporting schedule. The schedule, as updated, is issued via e-mail by the PM-E to the RLT and cognizant program officials. This schedule is developed based on each program briefing the AA and/or DAA approximately four times per year; and the Headquarters PMC and AA and DAA schedules.
6.2	RP AO	Draft and distribute to the RLT, the cognizant program officials, and the Code RW AO via e-mail an agenda with program briefing assignments and associated instructions.
6.3	AOs	<p>Obtain data for the monthly report, which may contain guidance and information from Code RP and RW Directors. The CPM generates the current status of the Commercial Technology programs and an assessment of how the programs are expected to perform against its future milestones/goals. Provide rationale for the program's status and plans for any extra actions, such as how a missed milestone might be made up, or how it may be readdressed within and between programs. Format the status and assessment into evaluation reports (see Appendix A for format).</p> <p>Compare progress toward approved PCAs and Program Plans. Identify variances. Use judgement based on skills, experience, knowledge, policy provided in NPD 7120.4A, Section 2.4.1 " Plan and Conduct Reviews and Assessments", and guidance from NPG 7120.5A Section 2.4, "Program Evaluation," to formulate the status and assessment information in consideration of the factors of cost, technical, performance, and risk.</p>
6.4	AOs	In coordination with the cognizant Division Director, determine if the program is on track. If the variances identified are judged to be significant by the Division Director (based on the Director's skills, experience and knowledge), the program is off track. If the program is off track, proceed to step 6.5. If the program is on track, proceed to step 6.6.

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| <b>6.5</b>  | AOs  | Use data obtained in step 6.3 to analyze why the program is off track. Consider cost, technical aspects, performance, and risk factors in performing analysis.   |
| <b>6.6</b>  | AOs  | Provide evaluation reports to the AA for review through the Director, Code RP.   |
| <b>6.7</b>  | AA,<br>Directors<br>Codes<br>RB, RG,<br>RP, RS<br>and RW | Review the report and provide comments, as applicable, to the Director of Code RP or the Code RP Director's designee.  |
| <b>6.8</b>  | AO   | Obtain and compile comments from Step 6.7. For monthly evaluation reports, the PM-E incorporates the AA's comments into the reports, summarizing the review results, action items and corresponding AOs. This document is placed on the secure Code R server and maintained by the PM-E in accordance with electronic document control as defined in section 3.                                    |
| <b>6.9</b>  | RP AO  | Consult with the Senior Engineer (Code R Front Office) to ascertain if the PMC will review the program. If the program is subject to PMC review, proceed to step 6.10; otherwise, proceed to step 6.11.  |
| <b>6.10</b> | RP DD  | Provide the quarterly report to the PMC in the format defined by Code AE, including responses to PMC action items. Code RP provides input. The report is sent to Code AE. The action items from the PMC may reflect actions from previous PMCs or IARs. This document is placed on the secure Code R server and maintained in accordance with electronic document control as defined in section 3. |
| <b>6.11</b> | AO   | Maintain reports as input to Program Formulation and Approval (H OWI-7100-R007) and to Performance Assessment and Investment Strategy (H OWI-7210-R014). This document is maintained in accordance with electronic document control as defined in section 3.   |

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## 7. QUALITY RECORDS

<u>Record ID</u>	<u>Owner</u>	<u>Location</u>	<u>Media</u>	<u>Schedule Number and Item Number</u>	<u>Retention/Disposition</u>
Quarterly Report to PMC	RP	Code RP files	Electronic	Schedule 7, Item 5B1	Retire to FRC when 1 yr old, or program completion (whichever is longer)
Monthly Evaluation Report	RP	Code RP files	Electronic	Schedule 7, Item 5A3a	Retire to FRC when 2 yrs old, or program completion (whichever is longer)

Appendix A      Sample Monthly Report Format. This Appendix is updated as needed by  
Code RP. The correct version may be obtained at  
<<http://ctd.hq.nasa.gov/iso9000/astdocs/>>